

DART SERVICE INSTRUCTION

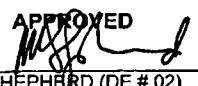
TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER
REF CANADIAN STC: SH92-6
REF FAA STC: SH967NE





For D350-591-213/-214/-215/-216 steps, customers have the option of installing D2732-030 cushion under the clamps to accommodate varying crosstube diameters and to improve fit, as indicted in Installation Instructions D350-591. This Service Instruction adds longer AN4-16A bolts to the parts list to allow installation of these cushions. See Figure 1 on sheet 2 of this service instruction for reference. Installation of the D2856-400-720 Abrasion Strips per Installation Instructions D350-591 is not required when the cushions are installed.

For D350-591-213/-214/-215/-216 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -213	Qty -214	Qty -215	Qty -216	Part Number	Description
X				D350-591-213	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X			D350-591-214	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-215	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-216	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
4	4	4	4	AN4-16A	BOLT

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED 	
BY: D. SHEPHERD (DE # 02)	
DATE: 09.08.05	
CERT. NO.: SH92-6	
ISSUE NO.: 11	

A	NEW ISSUE	RF	09.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9472	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BOLT ADDITION	NTS
DATE	09.08.05	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

REFERENCE ONLY

DART AEROSPACE LTD.

D350-591
Page 23 of 23

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	Heli-Access-Step™, Long Step – High Skid, LH
	X							D350-591-212	Heli-Access-Step™, Long Step – High Skid, RH
		X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
			X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
				X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
					X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
						X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
							X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.

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Revision: G
Date: 08.10.06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

59.75
- 1.36
58.39

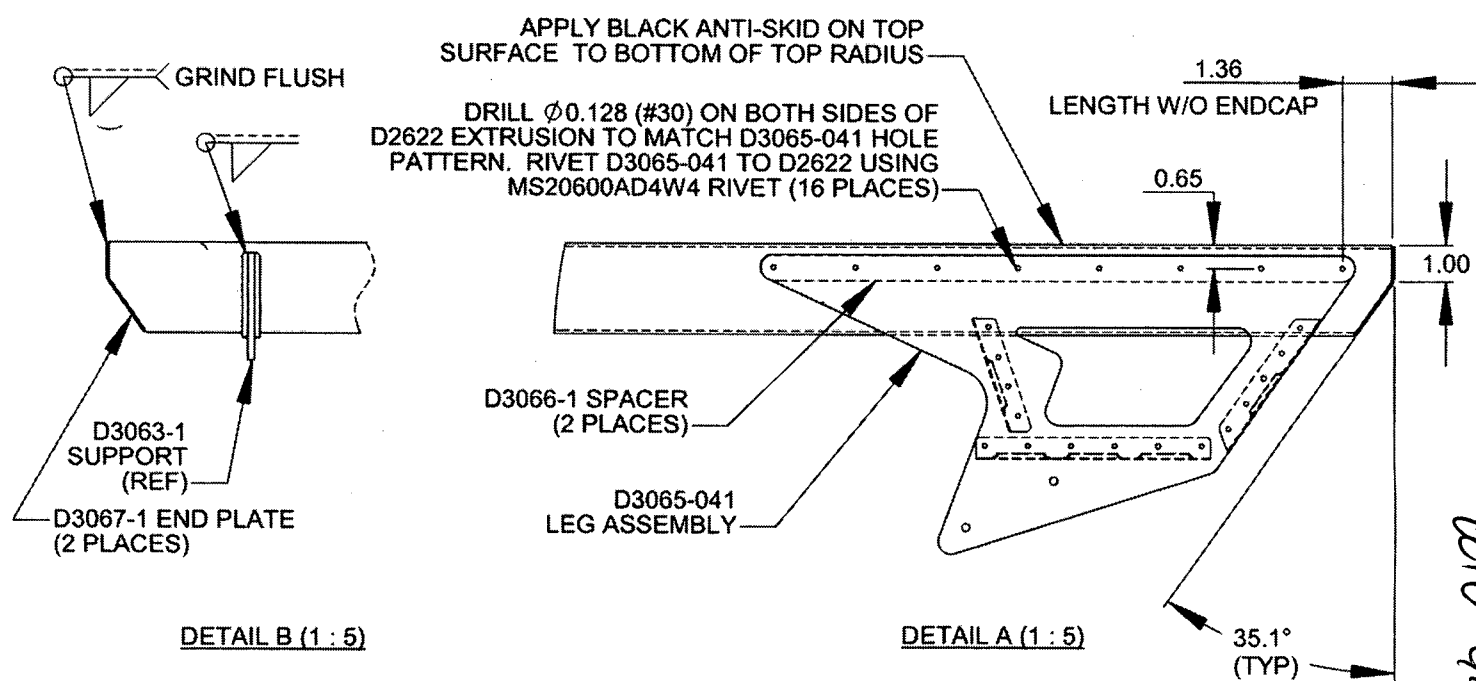
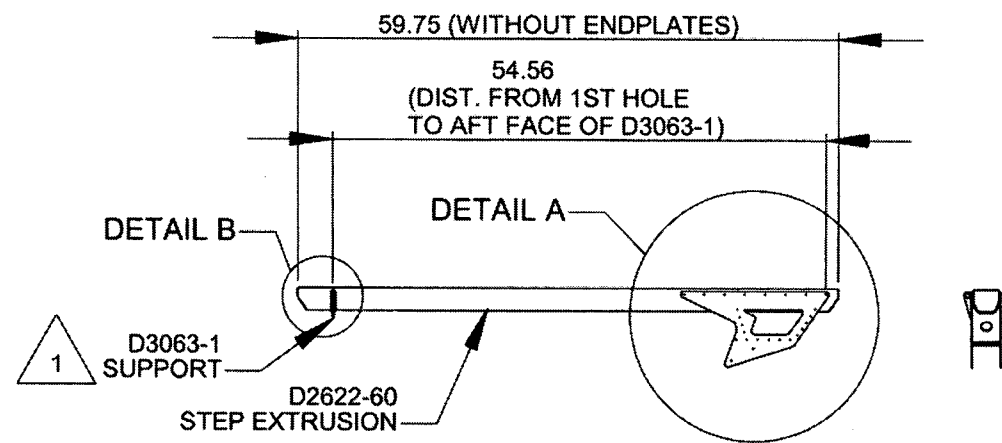
DART

QA COPY ISSUED

RELEASED
02.09.2004

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. A
02.09.11	D3078	SHEET 2 OF 2
TITLE	SCALE	
STEP ASSEMBLY, HI SHORT	1:20	

W/O 41904



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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & Initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3078	REV. A SHEET 1 OF 2
DATE 02.09.11		TITLE STEP ASSEMBLY, HI SHORT SCALE NTS	
A	02.09.11	NEW ISSUE	

RELEASED
02.09.20 *#*

SHOP COPY
RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 91904
PL 10-9-08

Part No.	Description	QTY -041	QTY -042
D3078-041	Step Assembly, High Short (LH)	X	
D3078-042	Step Assembly, High Short (RH)		X
D2622-60	STEP EXTRUSION	1	1
D3063-1	SUPPORT	1	1
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

GENERAL NOTES:

- 1) -041 SHOWN, FOR -042 INSTALL D3063-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 09, 2010 1:13:39 PM

Page 6

Work Order ID: 61904



Parent Item: D350-591-213



Parent Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010

Required Date: 9/17/2010

Start Qty: 2.00

Required Qty: 2.00

AN4-16A

Purchased

No

270

Each

180.0000

4

8

Bolt



10/10/14 SL (20)

Location

Loc Qty

Loc Code

ST358

75

115016

25

115159

50

ST360

105

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 09, 2010 1:13:39 PM

Page 5

Work Order ID: 61904

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010

Required Date: 9/17/2010

Start Qty: 2.00

Required Qty: 2.00

D2230-3

Manufactured No

270

Each

145.0000

2

4



Lug



10/10/14 SP

Location

Loc Qty

Loc Code

ST476

145

55452

2

59418

8

60191

35

60846

100

AN960JD10

NAS1149D03631

Purchased

No

270

Each

16.0000

4

8



Washer



10/10/14 SP

Location

Loc Qty

Loc Code

ST

6

107715

6

ST335

10

105792

10

MS21042L4

Purchased

No

270

Each

4,154.000

6

12



Nut



10/10/14 SP

20

Location

Loc Qty

Loc Code

ST300

4154

113422

68

114523

28

114718

16

114784

222

115108

1920

115589

1900

12

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Page 5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 09, 2010 1:13:39 PM

Page 4

Work Order ID: 61904

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010

Required Date: 9/17/2010

Start Qty: 2.00

Required Qty: 2.00

D2230-1

Manufactured No

270

Each

27.0000

2

4

Lug

Location

Loc Qty

Loc Code

ST476

27

60289

27

270

Each

2,081.000

2

4

MS21042L3

Purchased

No

Nut

Location

Loc Qty

Loc Code

ST300

2081

104625

10

114523

109

114784

1962

270

Each

728.0000

4

8

AN4-13A

Purchased

No

Bolt

Location

Loc Qty

Loc Code

ST357

228

115108

228

ST358

500

115159

500

270

f

235.6657

1

2.105263

D2732

Manufactured

No

Rubber Extrusion

Location

Loc Qty

Loc Code

ST412

235.665737

43118

2.5

56516

233.165737

cut qty of 4 at 3.00" as per dwg(D2732-030)

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 3

Work Order ID: 61904

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010

Required Date: 9/17/2010

Start Qty: 2.00

Required Qty: 2.00

AN3-35A

Purchased No

270 Each

150.0000

Bolt

Location

Loc Qty

Loc Code

ST353

150

115108

100

115457

50

D2856-400

Manufactured No

270 f

313.4060

Abraison Strip

Location

Loc Qty

Loc Code

ST403

313.4060421

56626

97.4060421

59920

216

cut qty of 1 at 4.00" X 7.20" as per dwg (D2856-400-720)

AN4-11A

Purchased No

270 Each

426.0000

Bolt

Location

Loc Qty

Loc Code

ST357

426

110382

226

115316

200

AN960JD416

NAS1149D0463J

Purchased No

270 Each

0.0000

Washer

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Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 09, 2010 1:13:39 PM

Page 2

Work Order ID: 61904

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010

Required Date: 9/17/2010

Start Qty: 2.00

Required Qty: 2.00

MS20600-AD4W4

Purchased

No

180

Each

1,019.000

16

32



Rivets



9/10.10.12

Location

Loc Qty

Loc Code

ST321

1019

113368

62

114181

11

114718

2

115573

944

32

D3066-1

Manufactured

No

180

Each

117.0000

2

4



Spacer



9/10.10.12

Location

Loc Qty

Loc Code

WA

117

58540

3

60194

66

61205

48

4

D3065-041

Manufactured

No

180

Each

63.0000

1

2



Step Leg Assembly Hi



9/10.10.12

Location

Loc Qty

Loc Code

WA

63

60200

34

61216

29

2

D3067-1

Manufactured

No

200

Each

102.0000

1

2



End Plate



9/10.10.12

Location

Loc Qty

Loc Code

WA

102

60141

102

2

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Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 09, 2010 1:13:39 PM

Page 1

Work Order ID: 61904

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH



Start Date: 9/9/2010

Required Date: 9/17/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:B 05.10.14 Modified step 10 KJ/EC
 IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM
 IPP Rev:C 06-06-27 Revised as per DSI9340 JLM IPP Rev:D
 10.03.17 incorporate seq 180 to 200 remove qc5 DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C Step Extrusion		Manufactured	No			110	Each	41.4200	0.5	1			
<div> <div>Location</div> <div>WA 361208</div> <div>55214</div> <div>58544</div> </div> <div> <div>Loc Qty</div> <div>41.42</div> <div>3.42</div> <div>38</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> </div>													
D3067-1 End Plate		Manufactured	No			130	Each	102.0000	1	2			
<div> <div>Location</div> <div>WA</div> <div>60141</div> </div> <div> <div>Loc Qty</div> <div>102</div> <div>102</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D3063-1 Support		Manufactured	No			130	Each	38.0000	1	2			
<div> <div>Location</div> <div>WA</div> <div>59663</div> </div> <div> <div>Loc Qty</div> <div>38</div> <div>38</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													

10.09.27

2

10.10.07

2

10.10.07

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

Thursday, September 09, 2010 1:13:34 PM



Page 7

Item ID: D350-591-213

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/17/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

290

0.00



Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D350-591-213

Location: PE
PPP Rev: _____

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

Thursday, September 09, 2010 1:13:34 PM

Page 6

Item ID: D350-591-213

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 9/17/2010 Req'd Qty: 2.00

Customer:




Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260  QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							<u>10/10/15 sp</u> <u>(20)</u>
270  Packaging Packaging	Pick Kit Memo	0.00 0.00							<u>10/10/15 sp</u>
280  QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00							<u>2</u> <u>10/10/15</u> kits bagged & stored in step key in step I.O'd.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

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Page 5

Item ID: D350-591-213

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/17/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230

Chemical Conversion Coat per QSI005 4.1

0.00

= JH

10/10/13

X2⁶⁴

0



HandFinish

Memo

0.00

Hand Finishing

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

BR 10-10-14

M115291

Memo

0.00

2



Powdercoat

Powder Coating

START TIME: 7:30
OVEN TEMPERATURE: 320°
FINISH TIME: 8:20

250

Wing Walk as per dwg QSI005 4.4 Batch M115028

0.00

= JH

10/10/14

2

0



HandFinish

Memo

0.00

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

Thursday, September 09, 2010 1:13:34 PM

Page 4

Item ID: D350-591-213

Accept

Revision ID:

Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00

Required Date: 9/17/2010 Req'd Qty: 2.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200



Large Fab

Large Fab

Large Fab

Memo

1- Rivet Leg Assembly as per Dwg D3078.
2-Bevel Aft end for welding
3-Inspect for foreign object as per QSI 024
4-Weld Aft End Plate as per QSI 004 & Dwg D3078
A/R Aluminum Rod MID 8436
5-Grind End Plate flush

0.00

0.00

H 10.10.12

2

f

210



QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

0.00

2 10.10.13

220



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8 10.10.13

12
44

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

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Page 3

Item ID: D350-591-213

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/17/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

QC5- Inspect part completeness to step on W/O

0.00

8 10/10/07

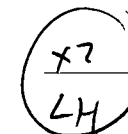


QC

Memo

0.00

Quality Control



160

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

10.10.07

2

170

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

SAD
10-10-07

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

Thursday, September 09, 2010 1:13:34 PM

Page 2

Item ID: D350-591-213

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 9/17/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8.10.09/07

+2

130

Large Fab

0.00



Large Fab

Memo

0.00

Large Fab

1-Bevel end for welding FWD ONLY
2-Weld Support using Jig DT8681, weld Fwd End Plate as per QSI 004 & Dwg D3072
A/R Aluminum Rod MID8436
3-Grind End Plate flush M114877

10.10.07

2 0

140

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

PD 10.10.07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61904

Thursday, September 09, 2010 1:13:34 PM

Page 1

Item ID: D350-591-213

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 9/9/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 9/17/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3078

A

DSI 9472

A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D350-591-213 CHG003

JG BG 10-10-14

110

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078
2-Drill extrusion as per Dwg D3078 using Jig DT8680 for rivets.
3-Deburr

K10.09.27 2